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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,898	07/31/2001	Pedro Queiroz Vieira	NEU 34	2442

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EXAMINER

PAIK, SANG YEOP

ART UNIT

PAPER NUMBER

3742

DATE MAILED: 04/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,898

Applicant(s)

VIEIRA, PEDRO QUEIROZ

Examiner

Sang Y Paik

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9,11-19 and 25-28 is/are rejected.
- 7) ☒ Claim(s) 7,9,10 and 20-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

## DETAILED ACTION

### *Claim Objections*

1. Claim 20 is objected to because of the following informalities: in claim 20, line 1, "opening" should be amended to -- openings -- to consistently claim for the wick openings.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 11, 12 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al (US 5,222,186) or Demarest et al (US 6,361,752) in view of Nothe et al (US 6,172,343) or Bunnell et al (US 1,346,793).

Schimanski et al or Demarest et al shows an evaporation device including a housing containing a heating block with a heating element, a wick protruding out of a wick opening in the heating block. However, neither Schimanski et al nor Demarest et al shows a plurality of heating elements with the control device having a plurality of heat setting.

Nothe et al shows an electrical heating device having a plurality of heating elements each having different capacities that can be arranged to produce different heat outputs. Bunnell et al also shows an electrical heating device having a plurality of heating elements having different capacities with a control device to produce a plurality of heat settings.

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In view of Nothe et al or Bunnell, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al with a plurality of heating elements having different heating capacities to produce a multiple heating output to control the rate of heating evaporation of the volatile substance contained in a container.

3. Claims 4, 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al as applied to claims 1-3, 11, 12 and 15-17 above, and further in view of Basaganas Millan (US 6,278,840) or Hohn et al (US 5,438,914).

Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al discloses all the structure claimed except having the wick opening between two parallel heating elements.

Millan shows a wick opening in a heating block where the wick opening is between two parallel aligned heating elements. Hohn et al shows a heating element arrangement where a heating object is situated between two parallel aligned heating elements. In view of Millan or Hohn et al, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al, as modified by Nothe et al or Bunnell et al, with two parallel aligned heating elements to evenly and uniformly heat the wick which comes between two heating elements.

4. Claim 6, 18, 19, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al as applied to claims 1-3, 11, 12 and 15-17 above, and further in view of Whitby et al (WO 01/05442).

Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al discloses all the structure claimed except providing one additional wick opening for additional container having a wick.

Whitby et al shows an evaporation device having two containers each having a wick protruding from the container with two heating elements for heating the wicks. Whitby et al teaches that multiple volatile materials can be provided either simultaneously or periodically. In view of Whitby et al, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al, as modified by Nothe et al or Bunnell et al, with additional opening in its heating block to accommodate another container with a wick to heat two volatile material simultaneously or separately depending on the user's desire.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al and Whitby et al as applied to claims 6, 18, 19, 25 and 28 above, and further in view of Wilson (US 2,715,056).

Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al and Whitby et al discloses all the structure claimed except a single container contain a first and second separate chamber.

Wilson shows a single container containing a first and second separate chamber. In view of Wilson, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al, as modified by Nothe et al or Bunnell et al and Whitby et al, with a single container having two separate chambers as an alternative structure to provide multiple volatile materials for evaporation.

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6. Claims 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al as applied to claims 1-3, 11, 12 and 15-17 above, and further in view of Barrington (US 3,414,864).

Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al discloses all the structure claimed except the heating elements being rod-shaped cylindrical resistance body.

Barrington shows an electric resistance element in a rod-shaped resistance ceramic body with a resistance layer in the form of a metal film coated thereon, and a terminal cap for electrical connection. The electric resistance of the film is then adjusted by removing narrow bands of the film by cutting. In view of Barrington, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al, as modified by Nothe et al or Bunnell et al, with the heating element shown in Barrington as an alternative heating element that can provide an accurate electric resistance to generate an accurate desired heating temperature.

7. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al and Whitby et al as applied to claims 6, 18, 19, 25 and 28 above, and further in view of Barrington (US 3,414,864).

Schimanski et al or Demarest et al in view of Nothe et al or Bunnell et al and Whitby et al discloses all the structure claimed except the heating elements being rod-shaped cylindrical resistance body.

Barrington shows an electric resistance element in a rod-shaped resistance ceramic body with a resistance layer in the form of a metal film coated thereon, and a terminal cap for electrical connection. The electric resistance of the film is then adjusted by removing narrow

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bands of the film by cutting. In view of Barrington, it would have been obvious to one of ordinary skill in the art to adapt Schimanski et al or Demarest et al, as modified by Nothe et al or Bunnell et al and Whitby et al, with the heating element shown in Barrington as an alternative heating element that can provide an accurate electric resistance to generate an accurate desired heating temperature.

*Allowable Subject Matter*

8. Claims 7, 9, 10 and 20-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Y Paik whose telephone number is 703-308-1147. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3463 for regular communications and 703-305-3463 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0861.

S. Paik

Sang Y Paik  
Primary Examiner  
Art Unit 3742

syp  
April 18, 2002